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PLACENTA PRÆVIA.

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Perhaps, during the whole round of the obstetrician's professional duties, there is no time when he will need more presence of mind than when he is called to attend a case of placenta prævia. The suddenness of the attack, coming, as it does, without pain or warning of any kind, and when the patient is apparently free from any looked-for danger. The shock caused by the unexpected gush of blood renders the patient extremely nervous, and produces a degree of fear and depression, from which she is not easily rallied. The anxiety created in the minds of the relatives and friends tends to heighten the excitement, and to make the surroundings of the case quite embarrassing. In this trying scene the physician, in the exercise of his duties, will be required to exhibit a degree of complacency not usually manifested by individuals in the ordinary walks of life. In order that confidence may be fully established and his orders be quietly obeyed, his discretionary powers will be taxed to their fullest extent. Perfect composure should dwell on his countenance, and mildness should govern every sentence he utters. At the same time his mind must be clear and his action prompt and decisive. Deliberate judgment must mark and determine every movement in the treatment of the case. While he is *kind*, at the same time he must be *positive*. He will remember that precious lives are entrusted to his care. I have seen but a few cases of placenta

prævia since I commenced the practice of medicine. I will give a short history of four cases, taken from my notes.

My first case occurred in the city of Philadelphia, in the year 1852. On the first day of June, about 10 o'clock in the morning, I was called to see Mrs. D., an American woman, twenty-two years old. She was healthy, with broad chest and well developed limbs; had dark hair and eyes, and weighed about one hundred and fifty pounds. I found her very much agitated, lying on a couch, on the first-floor of the house. She was dressed in her ordinary street clothes. Her mother, who was in attendance, informed me that she was *enceinte*, the first time, and had completed about five months of her pregnancy. That about half an hour before I arrived she had suddenly discharged from the "birth-place" more than a quart of bright red-blood; and that no pain attended its expulsion, and that it was still flowing. The mother was very anxious that the daughter should not miscarry, and asked me to use every effort to check it, if possible. After making a proper examination, and satisfying myself as to the condition of the patient, I immediately made a tampon by rolling up a soft napkin, in a wedge like form, and having immersed it in cold water, I introduced it into the vagina, pressing it up in contact with the uterus. I then ordered that the patient should be kept in a recumbent position, at perfect rest. After administering the eighth of a grain of morphia, and giving directions concerning the case, I left, and did not see the woman again until 9 o'clock that evening. Finding my patient sleeping and apparently very comfortable, and learning that she had been asleep

for two hours, I did not disturb her, but left her, as she was, for the night. On the next morning I removed the tampon, and found that a very small amount of blood had escaped during the twenty-four hours. I placed a dry napkin in the vagina, and did not see the patient again that day. On visiting Mrs. D. on the morning of the third day, I found her sitting up in an arm-chair, looking well. On removing the napkin from the vagina, I found scarcely a trace of blood visible. She at once resumed her household duties, and appeared as cheerful as ever.

On the 30th day of the same month, precisely four weeks from the time I had left Mrs. D., I was sent for again, and found my patient in the same condition I had seen her on the first day of the month. I pursued a course of treatment precisely similar to my first course, and the same good result followed. My patient was all right again within three days. During the interval from this time until the 13th day of October I was called three times more to see her, to witness each time a similar scene, to administer the same kind of treatment, and to see the same relief follow.

Four months and twelve days passed away, from the time of my first visit to Mrs. D. During that period she had five attacks of bleeding, and lost, perhaps, half a gallon of blood, yet she did not appear to have become very much weakened by the loss. On the morning of October 13th I was sitting in my office, writing; a woman came in, who was so bespattered with blood that I did not recognize her until I heard her voice. The woman was the mother of Mrs. D., who asked me to come at once to her daughter, who had been attacked a few minutes before with a very severe pain in the lower part of the bowels, and that the pain had continued with such violence that she was afraid it had "broken something inside of her." In less than five minutes I was at her bedside; she was in great agony, pain following pain in rapid succession, with an interval of scarcely a minute. A large quantity of blood had been ejected from the uterus, splashing the wall at a distance of three or four feet from where the patient was lying. A portion of the bed clothes was saturated with blood, and a small stream of fresh blood was running off the mattress, down to the floor.

I made an examination and found the os uteri largely dilated, with the placenta extending entirely across it, and adhering on all sides. A rupture through the body of the placenta readily admitted my hand. The torn and bleeding vessels of the placenta were pouring out a large

quantity of blood. I at once passed my fingers around the inner edge of the mouth of the uterus, and by insinuating them between the placenta and the walls of the uterus, I succeeded in dislodging the entire placenta and bringing it away in one mass. The discharge of blood following the removal of the placenta, was enormous. After severing the cord, I proceeded to turn the child, which was accomplished with little difficulty, by bringing down first the right leg and then the left one; and by continued traction on the lower limbs and body of the child the delivery was effected in a very few minutes. It was a female child, and appeared to be dead. With much effort the child was resuscitated. For more than six months the child remained very small and puny-looking, appearing at times almost like a skeleton. The child continued feeble in body and mind for many years, and her menstrual period did not commence until her eighteenth year, and even after puberty she did not manifest very great intellectual powers. The girl was married when she was twenty-two years old, and is at the present time the mother of three living children; all seem to possess about the same amount of brightness usually seen in children of the same age in the same condition of life. They do not appear to have inherited either the *mental* or the *physical* weakness of the mother. Mrs. D. recovered within a month, but has never been pregnant since.

On the twenty-fourth day of June, 1854, late in the afternoon, I was called to see Mrs. J., an Irish woman, on north Second street in the city of Philadelphia. She was a short, stout, light-complexioned woman, thirty years old, and was pregnant the third time. When I entered the sick woman's chamber I found three midwives in attendance. They appeared to be employed chiefly with their tongues, and they were all talking at the same time. From the vehemence with which some of the sentences were uttered, I am not quite sure, but I think they were quarreling. As soon as I entered the room Mrs. W., the oldest midwife of the three, came to me and said, "Doctor, here is a case of *breech presentation*; there has been a dispute between the other two midwives and myself; they both contend that the woman's womb has turned over, and that the child cannot be born until the womb is turned back again." This midwife also said "that she knew something about this business, as she had attended at least a hundred confinements in her life, and had seen among them plenty of cases just like the present one." I had a few minutes' conversation with Mr. J., the woman's

husband, and learned from him that his wife had been in labor nearly twenty-four hours; that Mrs. S., the first midwife sent for, seeing a discharge of blood when she first came, said that the confinement would soon be over, as Mrs. J. had a *good show* already. After this midwife had remained about twelve hours, and the pains had become very severe, and the *show* seemed to be increasing, and as no other favorable sign was visible indicating the appearance of a child, the husband became alarmed and sent for another midwife, and after ten hours more a third was sent for. The trio now spent another two hours quarreling among themselves, which so disgusted the husband that he concluded he would have medical aid, and sent for me, imploring me to save his wife's life if possible.

I examined the woman and found, instead of a breech presentation, that the *os uteri* was largely dilated, and the body of the placenta was packed tightly in the opening. While I was attempting to loosen the adhering edges of the placenta from the left side of the mouth of the uterus, a violent pain came on, carrying the placenta, with much force, out of the uterus and down through the vagina to the outside of the vulva, and bringing the head of the child into the vagina. As no other pain followed, after waiting a few minutes, I put on the forceps, and delivery of the child was effected at once. The child was dead. The uterus contracted and no unusual hemorrhage occurred after the delivery. Mrs. J. informed me that she had had her regular monthly sickness three different times after the sixth month of her pregnancy. She made a quick recovery, as she was well within three weeks from the date of her delivery.

On November 20th, 1875, Mr. O'N—l came for me, with a message from Mrs. K., a midwife, asking me to come as soon as possible and bring my forceps with me. On my way to Mr. O'N—l's house he told me that his wife was bleeding to death; that this was her first confinement; that three weeks before that time Mrs. K., the midwife, thought that Mrs. O'N—l would be confined, but the bleeding had stopped and did not return again until to-day; that the midwife had told him that this was a case where the afterbirth comes before the child, and that it is very dangerous. When I arrived at the house I found the patient was a healthy Irish woman, twenty-two years old. She had been in the United States about three years. The midwife informed me that she had been with the patient eight hours and did not discover until half an hour before that the afterbirth had grown over the mouth of the womb.

She said the woman had bled a great deal; that the pains had been very strong and frequent, in fact, they had continued all the time. I made an examination and found the *os uteri* sufficiently dilated to allow the head of the child to pass, but the placenta was covering the entire space and adhering firmly to the left side of the lips of the uterus. The loosened, ragged edges of the placenta could be felt on the right side of the *os uteri*. With each pain a small stream of blood, was poured out. I immediately inserted the first and second fingers of my right hand between the lips of the uterus and the adhering edges of the placenta, and passed them slowly upward on the inner surface of the uterus. By this action the placenta was loosened and the discharge of blood was greatly increased. I pulled the placentas away, and after tying and cutting the cord, I proceeded to turn the child, by bringing down the legs and continuing the traction until the shoulders were entirely free, then by putting my fingers into the mouth of the child, the delivery was effected at once. The child looked very blue, but with some little manipulation about the chest it was not long before it commenced to cry, and in a few hours it was as bright as it possibly could be. In two weeks Mrs. O'N—l was up and well.

I will describe one more case which I attended in the summer of 1879. In the early part of July, Mrs. G., a Jewish lady, thirty-two years old, called on me and engaged me to attend her in confinement, which she said would occur about the middle of August. She was pregnant the third time. Her husband, who accompanied her, told me he had made arrangements to take his family, for a month, to Appleboughville, a country town forty miles from Philadelphia, in Bucks county, Pennsylvania; that he selected the place on account of its privacy, as it was nine miles away from any railroad station. He also assured me that if anything should happen to his wife requiring my services, he would at once inform me by telegraph, and in less than three hours I could easily reach the village.

Mr. G., and his family left, and in a few days I received word that they were pleasantly enjoying their cosy little retreat. During their sojourn in that quiet region I received word from the lady several times, and everything went along smoothly until the morning of August 1st; as Mrs. G. was returning from a short carriage ride she was suddenly startled to find that, without any previous pain, or warning of any kind, about a pint of warm blood had issued from the vagina. Mr. G. was so much alarmed that he not only

sent a telegraphic despatch to Philadelphia, for me to come as soon as possible, but he also called in the only physician in the village. The Doctor was very timid and sent immediately to Doylestown, which is nine miles away, for two older physicians in consultation. The telegraphic despatch sent for me by Mr. G. did not reach me until twelve o'clock noon. The next train did not leave until two o'clock, p.m., and as the last nine miles of my journey had to be gone over in a wagon, on a country road, I did not reach my patient until six o'clock in the evening. When I arrived I found that three physicians had been in attendance; two of them were at the bedside, and they appeared more scared than the patient herself. As the treatment of the patient, up to this time, had consisted almost entirely of *talk*, and as a great quantity of it had already been dispensed, without any good result in the case, and as both of the doctors said that they had several pressing calls to make, they were much pleased that the family physician, from Philadelphia, had arrived so opportunely. The case was given entirely into my charge, and both physicians left. One of them, as he was leaving the house, stated that the woman would die before morning, and as the city doctor had her in charge, one of them would be saved the trouble of writing the *death certificate*.

I immediately had Mrs. G. placed on her back, in bed, and introduced a tampon, and the lady assured me that she felt much better. Before retiring, I gave my patient the eighth of a grain of morphia, and she slept well all night. I slept in an adjoining room, and was not disturbed the whole night. In the morning I removed the soiled tampon, and introduced another; the bleeding had entirely ceased. As I had left Philadelphia in a hurry, and had left a few patients who were expecting to see me that day, and as I believed the confinement of Mrs. G. would not take place for a week or ten days, I made a proposition to take Mrs. G. to her home in Philadelphia. The two physicians who had resigned the case the evening before, hearing that my patient had not died, and learning that I intended to take her to Philadelphia, both of them, without invitation, ventured back again, and bitterly opposed the removal of Mrs. G. to Philadelphia. The village doctor said the woman would die before she had gone three miles of the journey. Having procured a light spring wagon, I had a mattress placed in it, and after having introduced a fresh tampon, and having bandaged my patient properly, we placed her in a recumbent position in the wagon, and

drove slowly, nine miles, to the railroad depot. We here transferred her to a comfortable bed in the railroad car, and arrived safely in Philadelphia, about five hours after we left the village. Not one ounce of blood passed from her during the whole journey. For five days I visited Mrs. G. once or twice every day. She was up and walking about her room every day, and she slept well at night. No bleeding had occurred since her arrival home. A folded napkin had been used as a tampon, and a fresh napkin was introduced every ten or twelve hours. She had a craving for food, and was allowed to partake freely of eggs, bread, rice, potatoes, milk, tea and coffee, and moderately of beef and mutton. Her bowels were opened once every day. Her pulse ranged from 75 to 80 to the minute. On the 6th day of August, on the removal of the tampon, she discharged about a quart of blood; no pain whatever attended the bleeding.

On the 7th day of August my esteemed friend, Doctor Richard J. Levis, of the Pennsylvania Hospital, saw the case in consultation with me. The use of the tampon was continued. No other treatment was used. For five days longer a very small amount of blood was discharged, perhaps a teaspoonful each day.

On the morning of the 12th day of August, I was called in haste to see Mrs. G., who was complaining of severe pains in the lower part of the abdomen, accompanied with a gush of blood at the commencement of each pain. In making an examination, I at first thought there had been a hole torn through the body of the placenta; but after a more careful examination I discovered that the placenta extended only about one-half of the distance over the mouth of the uterus: that it was firmly attached on the left side of the uterus, with sufficient space on the right side for two or three fingers to be readily admitted. My first impression was to remove the placenta at once, by peeling it off of the inner wall of the uterus, and then complete the labor by turning, but as there was scarcely a minute of interval between each pain, and as the head of the child was descending with much force, I thought I would wait a little longer, and when there was sufficient dilatation of the os, rupture the membrane and use the forceps. I did not have to wait long. The pains continued to follow each other very rapidly, and as each pain brought with it the discharge of a large amount of blood, I was commencing to feel very anxious for the speedy delivery of the child.

During a severe pain I ruptured the membrane. After the escape of the liquor amnii a

temporary lull of the pains took place for a few minutes. While I was preparing to introduce the male blade of my forceps a pain came on, with a force seldom witnessed, bringing the head of the child entirely out of the uterus and exposing the vertex outside of the lips of the vulva. Of course, my task was a very easy one now; with the next pain I introduced my index finger into the mouth of the child, and the delivery was but the work of a minute. After severing the cord, I passed my hand into the vagina and inserting my fingers between the placenta and the uterus, with a very little effort loosened the placenta; there was a slight gush of blood, perhaps an ounce or more passed, but on removing the placenta, the uterus firmly contracted and no unusual discharge followed. The child was alive, but was very small and weak. As it was a male child, and as the parents were Israelites, it became a question of serious consideration with me whether this delicate little being could possibly survive the severe shock which would result from circumcision, if it should be inflicted upon it on the eighth day from the time of its birth. I had a conversation with the family and the friends and asked if the operation could not be delayed until the child became stronger? Although they said that such a course had been pursued in some rare instances, yet after a conference with the gentleman who was to perform the operation they agreed that the circumcision should be performed on the eighth day. The ceremony took place, and just six weeks from the date of its birth the child died. Perhaps it would not have lived, even if the circumcision had not been performed. Mrs. G. convalesced very rapidly. She was entirely well within a month. Her lochial discharge lasted only nine days.

From these four cases we may glean a few facts worth remembering.

- 1st. Scarcely any medication was necessary.
- 2d. Styptics were not used.
- 3d. The tampon and rest in the recumbent position were the remedies chiefly relied upon.
- 4th. Turning was not necessary in every case.

It is true that no positive rules can be laid down to govern the obstetrician in the management of cases of *placenta prævia*. Very much will depend upon his own good judgment and his aptitude in applying the means he may possess in such a manner as to secure beneficial results in the cases he may be called upon to treat. However, the notation of a few general directions will not be out of place in this paper. One of the first things to do is to make a thorough

examination and ascertain whether it is a case of *placenta prævia*; use the speculum, if necessary, and find out if the placenta covers the entire mouth of the uterus; if it does, the management of the case will be very different from a case where the *os uteri* is but partially covered. You will also learn the duration of the gestation, and whether more than one attack of hemorrhage has occurred during that period. Find out if the discharge came on suddenly and without pain, as a knowledge of all of these facts will be necessary to determine you in your diagnosis and treatment of the case. When you have made out a clear case, if the woman is not in labor, your first duty will be to arrest the hemorrhage as soon as possible. This can, perhaps, be more speedily effected by the use of the tampon than by any other means you may have at hand at the time. A soft towel or napkin adroitly folded and placed in the vagina, so as to come in contact with the *os uteri*, will answer the purpose as well as anything else. Styptics, in these cases, are of little consequence, where they are not followed by the tampon, creating pressure directly upon or near the bleeding vessels. If you should conclude to use styptics perhaps the best are tannic acid, alum and per-sulphate of iron.

Placing the patient in a recumbent position, is an injunction which must be strictly enjoined. Have the hips elevated, by placing a bolster or any soft roller of muslin under the body, in the lumbar region. By these means you will generally control the hemorrhage for the time being. Ergot has been recommended, but if the *os uteri* is rigid, and there is no dilatation or other signs of labor, I would say do not use it, it will do more harm than good. As the patient, from the loss of blood, has become weakened in body, and from the fright experienced is suffering great prostration of the nervous system, the physician in issuing his directions will express himself in language suited to the temperament and condition of the patient. While dispatch may be necessary in everything done, yet the physician is not to bluster or allow others to do so, in the presence of the patient. Excitement on the part of the patient, or the relatives, or the friends, is to be checked as soon as possible. The strength of the woman is to be kept up by light farinaceous diet, and by drinking plenty of cold water. Little or no medication is requisite. Mild encouraging language from the medical attendant will do more good in overcoming the nervousness of the patient than any other means we can use. Nothing will be gained by harsh or dis-

agreeable words. If the patient should be restless, an anodyne may be given before the physician leaves the patient to the care of the nurse. Should the physician leave the patient, he will return in eight or ten hours; if the patient is not sleeping, he will remove the tampon, and if no bleeding takes place, he will introduce another, and direct the patient to remain perfectly quiet, and perhaps the whole difficulty will pass away, for the time being. If the bleeding has not stopped, he will immerse the fresh tampon in cold water, before it is introduced into the vagina. If labor-pains are present, an examination will be made, with a view of ascertaining if any dilatation of the os uteri has taken place. If labor has really commenced, and the os uteri has become largely dilated, it is the imperative duty of the physician to effect the delivery as quickly as possible, if the same can be done with perfect safety to the woman. Every effort is to be made to save the life of the child as well as that of the mother; but if it is found that the life of the woman is being imperilled by any delay, the delay must not be continued, but the delivery must be effected whether the life of the child is saved or not. This procedure is entirely proper in all cases where there is danger of the woman losing her life. If with each pain a large quantity of blood is lost the placenta is to be taken away at once. This may be readily accomplished by passing two fingers of the right hand between the lips of the uterus and that part of the placenta that is still adhering and gently peel the placenta away from the uterus. As the adhering surfaces yield to the action of the fingers, there will be an increased flow of blood, for a few minutes, but a little force used upon the body of the placenta will almost always cause it to fall into your hand. As soon as the placenta is taken from the vagina tie and cut the cord. Then ascertain the position and condition of the child. If the head is within reach and the bleeding still continues, put on the forceps and effect the delivery at once. If the woman is not worn out by a protracted labor, delayed, perhaps, by the ignorance of a midwife, the womb will contract almost as soon as it is emptied of its contents. If it is deemed by the physician impracticable to use the forceps, pass the hand into the uterus, bring down the legs, and deliver by turning. If the uterus does not contract readily after the delivery of the child, and the hemorrhage continues, grasp the uterus, through the abdominal walls from the outside, and knead the abdomen with the hands, and contraction will almost always follow. If the

mouth of the uterus is but partially covered with the placenta and you find there is sufficient room for the passage of the head, your procedure will be to deliver, if possible, without taking the placenta away, but even here you will not delay too long, waiting for nature, as hundreds of little blood vessels from their open mouths are pouring out the life current of the patient, and will continue to do so until you have effected the delivery of both the foetus and the placenta.

Two features I have noticed in all the cases of *placenta prævia* I have ever seen. One is, the pains follow each other more rapidly than in ordinary cases; the other is, the expulsive power of the womb appears to be much greater than it does in cases where no abnormal condition exists. I know of no writer who has mentioned either of these facts. Might not this phenomena be accounted for on the following hypothesis: That the expelling power of the uterus resides entirely in the contractile fibres of the fundus and the body of the uterus, and not in the cervix at all, and as the placenta in these cases covers no part of the fundus and but a small portion of the surface of the body of the uterus, those parts being free from adhesions, the uterus is allowed to perform its functions more readily than if a larger portion of its contractile fibres were adhering to the placenta. This is merely an idea of my own, and as such I give it for whatever it is worth. I have seen cases of hour-glass contraction of the uterus, where the placenta was attached to the fundus and the upper portion of the uterus, and the uterus seemed to be very flabby, on account of the adhesions existing, while the fibres of the middle portion were firmly contracted, because they were free to act, having no body of any kind attached to them. It is a well known fact that in any ordinary case of labor, when we have freed the inner walls of the uterus from contact with the foetus and the placenta, as a general thing, contraction takes place at once.

936 North Fifth Street.

HOSPITAL REPORTS.

BELLEVUE HOSPITAL, N. Y.

CLINIC BY WILLIAM H. THOMSON, M.D.,

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We pass to-day, gentlemen, from *phthisis*, a very easily recognizable disease in the majority of cases when fully developed, on account of external symptoms that are suggestive of the disease, as well as on account of a clear and con-

nected history, to a disease which has no external symptoms peculiar to it, and whose history may be so diverse in a given case, from that of any previous case in your experience, that you will scarcely recognize any similarity between them. You will hardly find an affection whose manifestations are so numerous, so dissimilar, and frequently so obscure, as are this one's. To illustrate this, let us study these cases.

In the first place, you do not notice in the appearance of either of these three patients any indications of disease of any of the organs in the several visceral cavities, unless it be in this patient, No. 1. He has a corrugated forehead, and that may slightly point to some one of his symptoms. We do not know whether it does or not, but certainly he has not very much trouble with the chest, although he has a little dyspnea, which I notice already. Perhaps he has had some trouble about the chest. There is not anything very distinctive about the appearance of his mouth, to show whether he has any trouble in the abdominal cavity. The second patient certainly does not show in his appearance trouble with any of the organs in the several visceral cavities. No. 3 has a frown on his forehead, and is emaciated. No. 1 is partially emaciated. No. 2 is not at all emaciated. And so you will find in taking the external aspect of the patient, there will be perhaps but one thing which will lead you to suspect his disease, and that is the color of the skin, but that is not uniformly the same. As to the history, it will differ in every one of them.

How long have you been sick? (No. 1.) "About six weeks." How were you taken sick? "A hard cold and shortness of breath, and cough." I told you, gentlemen, this man had some dyspnea, evidently. Why so? Because he keeps his mouth open, and that is characteristic. It is not because the man is lazy, and has, according to the old saying, "a fly-trap in his mouth." It is not that at all. It is the mouth that is very slightly open, with the lips drawn wholly over the teeth, that indicates trouble with the breathing. It is the open mouth with the lips hanging loosely down, with an expression of stupidity, that comes from laziness.

Well, your sickness began with a cold; you had a cough and shortness of breath, but you never had any trouble before that; and since you came into the hospital, you have got a good deal better; your breathing is better and your cough is better. Have you anything else to tell about your sickness? You did not have any swelling? "O, yes. Swelling about my ankles." Why didn't you say so? "I forgot it." Most people would not forget that.

How long have you been sick? (No. 2.) "About five months." What did you first notice? "Swelling about my feet." Did you notice anything else? "No, sir." You did not have any headache; had no sickness of the stomach; no shortness of breath? "No, sir."

How long have you been sick? (No. 3.) "About six weeks." You were pretty well before that, were you? "No, sir. I have been out of sorts for a good while; about nine months." But this trouble which you have now has been of about six weeks' dura-

tion. Were you able to do your work last year? "Yes, sir." You are a laboring man. What was the first thing that made you sick nine months ago? "I got a cold, a very bad cough, and a weakness of the stomach. Would throw up my vituals." Which was the worse, the weakness of your stomach or the cold? "The cold. Would throw up my food in the morning. Did not have any pain in the stomach." Did it feel comfortable when you got rid of your food, or did it feel bad? "Always felt bad." Would you throw up if you had no food on the stomach? "Yes, sir." I want you to note that, gentlemen; he had nausea at all times; that is, sometimes, whether he had anything on his stomach or not. When you threw up, then, what kind of matter did it appear to be? "Water. It was burning hot. Had no color about it."

What happened to you six weeks ago? "About the same." How about your cough? "It got worse; and my stomach got worse." Did you ever have any swelling about you? "Yes. My legs used to swell once in a while." I am impressed, gentlemen, that his is not a typical case of the disease; that there is a cardiac element in it. On examination, I find my impression was correct.

Well, now, here are three cases of the same complaint, and their symptoms are not by any means the same. In the first patient, the first thing that attracted his attention was a cold with cough, and shortness of breath; and this cough got worse. Along with it, which he had forgotten about, as if it were a minor matter, he had water-leg, or dropy of the feet. The second patient complains of nothing but swelling, and if it were not for that he would probably consider himself well. The third patient had, along with a cough, sickness of the stomach; and he used to vomit, not because his food disagreed with him, but because of sickness of the stomach. So I might go on and show you case after case, in each of which the story would be different. A fourth case will tell us that the first thing he noticed was a headache; and that he had it a great deal, along with nausea. A fifth case might say he did not notice anything until his sight began to fail; that he thought he must be growing old, or that something was wrong with his sight; it grew dimmer and dimmer, until finally he went to the oculist, who discovered the cause of the trouble. Another patient has nothing but an attack of diarrhoea, and this diarrhoea will not get well; it keeps on and keeps on, and he comes to you on account of this persistent diarrhoea. Another patient comes to you with difficulty of breathing, and absolutely nothing else. You examine him, and find that he has pleuritic effusion of which he was not aware. He was so little sick from pleurisy that he had all this trouble without being at all aware that he had a real serous inflammation. Another case will be waked up at night, for the first time, with asthma. He never had asthma before; had lived all his life up to the present time, without an attack of asthma; he went to bed apparently as well as anybody, but woke up in the night with intense difficulty of breathing. And so on. I think it would be a real curiosity for any physi-

cian of extensive practice to look over his notes, and see if he could find any two or three cases of this disease presenting the same symptoms. Hence it is that this disease is so often overlooked. It may present the symptoms of almost any disease of the body.

Here, for instance, is a case of cough; here a case of swelling of the feet; in another case there will be diarrhoea or dysentery; another, the symptoms of nervous derangement; another, simply general loss of strength, a feeling of weakness, and the patient does not know what is the trouble; another patient still will come to you for dyspepsia; he is so very bilious, has been becoming more and more bilious since eight or nine years back, until now he vomits his food. I think I have seen within the past year patients with this disease whose attention was first attracted in the different cases to trouble in every different organ of the body, from head to foot; and it is for this reason that Bright's disease of the kidneys is more frequently overlooked, until it has advanced to the last stages of the disease, than any other affection. It is the one disease that you must always be on the lookout for, and hence it is your business to ask every patient who comes to you for a specimen of his urine, it matters not what he comes to you for. I once heard a story of a doctor, imperfectly educated, and imperfectly furnished in his brains, probably, who was so stupid that it was a wonder to all his friends how he got through a medical college. He asked an old physician what he should do first when a patient came to him for treatment. He told him to give him an injection. Well, the first case that came in was a case of dislocation at the shoulder joint, and he insisted upon giving the man an enema right away. The man resisted, and in the struggle got the dislocation reduced. Nevertheless, it is a good routine practice to ask for a specimen of the water. It is not necessary in a case of shoulder joint luxation, probably, but if it is a medical case, not a surgical one, by all means examine the water and see what may be its condition; but I will say this, that even that may not give you much information with regard to Bright's disease. There may be present the worst form of Bright's disease with very little evidence of it in the urine. Albumen is present in about half the cases of Bright's disease when it has lasted six months. You may take that as a rule, that in about half the cases of six months' duration albumen will be found in the urine. In the other half it will be absent. We would not have dreamed five years ago that the proportion between the cases of presence and absence of albumen in the urine in Bright's disease was so nearly equal. It was supposed to be present in the majority of cases. Albumen is probably absent in about one-third of the cases of Bright's disease, from the beginning to the end of the disease; that is, they do not have albuminuria, or if they do it is only occasionally, so that it would be very likely to be overlooked, even if the urine were examined quite frequently. This has been shown in the published statistics of some European hospitals lately. The number of cases in which the disease has not been discovered previous to death, but in which it is

manifest at the post-mortem examination, is irresistible proof that it does not indicate its presence in the urine by any of the tests yet known.

Unquestionably, the real test of Bright's disease is the amount of urea eliminated in the twenty-four hours. Now, that is a complicated thing to make out. It is a very difficult thing to discover, except by a very careful chemical analysis. An illustration of this: Within the past week a friend disagreed with me with respect to the nature of a given case, he ascribing it to malaria, I to Bright's disease. He said the urine had been examined repeatedly, and no indication of Bright's disease had been found. To settle the point, we had some urine examined for the amount of urea passed in the twenty-four hours. One day it was only thirteen grains, another only fourteen grains, for the whole twenty-four hours, and on another day it contained only eight grains, and then it went up to forty-four. Now, you know that this last figure is not nearly high enough for a healthy person; and it matters not how much fluid the kidneys are passing, they are passing water, not urine. And sure enough, the specific gravity in this case went down one day to 1.001, another day 1.008, another day 1.008. Now, a patient passing such urine as that would sooner or later have uremia. This patient's urine had been examined for albumen and casts, and examined very carefully, too, but none was found; and yet it was a true case of Bright's disease for the time being, and I believe it has been a case of Bright's disease all along; the kidneys are not working, and hence the patient's anaemia, and headache, and pleurisy, all of which were present, due to a condition of the kidneys causing uremia, rather than to malarial infection.

Now, this shows that you can by no means, in a suspected case of Bright's disease, simply take a specimen of the urine and examine it, and pronounce a correct diagnosis of the patient's trouble. You can more easily say that it is a case of Bright's disease, than that it is not. Now, how can you tell whether the kidneys are not doing their work; whether the blood is poisoned, capable of destroying your patient by toxæmia? A low specific gravity of the urine, considered in connection with the amount passed, will enable you to tell pretty well whether your patient is in a uremic condition or not, no matter what the other signs may be. A patient is a great deal worse off passing a small amount of urine of a specific gravity of 1.008, without any albumen, than if he were passing a good quantity of urine of a specific gravity of 1.020, being half albumen: I would, myself, a good deal rather be passing a half quantity of urine one-third albumen, of a specific gravity of 1.025, than to be habitually passing watery fluid the specific gravity of which is 1.006; for I know that in the one case the albuminuria may be recovered from, but in the other case, if it is habitual, it points to a seriously damaged kidney.

Hence, as to the prognosis. If you can once get the kidneys to secrete urine of 1.025 in specific gravity, and in quantity a pint and a half for the twenty-four hours, you can give a good prognosis, no matter how much albumen may be present. The prognosis is yet good, whenever the kidneys

can secrete enough of the salts to bring the specific gravity of the urine up to 1.025. The case may be a very sick one, but the kidneys are not so far damaged but what they can do their work. But we are frequently called to cases that have continued so long that no symptoms in the constituents of the urine remain; the kidney in great part has been washed away, and you have an organ that is, the greater part of it, consisting only of the free, clean tissue, incapable of repair.

Consider a case like this patient's, whose trouble began with a cough. He had no swelling of the feet, nor of any other part; one half, at least, of the true cases of Bright's disease do not present this symptom. He had a violent cough, but you noticed he had a good deal of dyspnoea with the cough, which is not of long standing, and therefore it is not due to ordinary bronchitis. Now, suppose his dyspnoea were due to ordinary bronchitis, how would he behave? His shoulders would be elevated, and he would rub his chest in an indefinite way, showing that he had a great deal of oppression of the chest, as it is usually called. Pain and soreness and fever, with febrile excitement and redness of the face, will all indicate to you that it is an ordinary case of bronchitis. But suppose a patient comes to you breathing with difficulty, without any fever, without soreness, but has a cough of recent date; it should lead you to suspect at once that the dyspnoea is due to kidney affection causing blood poisoning.

You should next note the pulse, and here you should get a sign which is almost never absent. But you should begin by examining the arteries before feeling the pulse. This patient has a somewhat hardened artery; it can be felt at this point, but not up there. It should not be apparent to the touch anywhere in the young person, or in the very healthy older person. If they are emaciated, it can be felt about here. In this patient it feels somewhat hard, as I said, like a cord or tendon. Now, no healthy artery ever feels so. That means that the artery is thickened; and now the question arises, is it thickened by old age, or is it thickened by the poisoned condition of the blood? If it were thickened by old age it would feel rough, irregular; there would be atheromatous patches in it. Sometimes, in the old person, they are so easily distinguished that the artery feels like a string of beads. In this case, however, the artery is perfectly smooth. It is more like a smooth wire, which indicates that it is thickened uniformly, and therefore by a uniform cause, which is the condition of the blood.

Now, I feel of the pulse. It is an incompressible pulse; it beats under all four fingers with which I am feeling it. It beats so plainly that it requires a great amount of pressure to stop it. Although I am making considerable pressure on it with the proximal fingers it can be felt under the distal finger.

Now, there is another thing to be learned, and that is, whether this artery is very much thickened or not, and that I find out in this way: if it is very much and permanently thickened, by pressing firmly on the artery here with these two fingers I obliterate the current of blood in the artery further along, and still the artery can be

felt. In this case, after stopping the flow of blood through the artery I cannot feel it. Therefore, it is not very much thickened. You understand that point? It is a very important point. You want to know whether an artery is hard because it is overfilled with blood which does not run out of the artery easily at the distal end, and therefore causes this cord-like feeling, or whether it is due to a thickening of the walls of the artery. If it be due to a thickening of the walls of the artery, when the current of blood is checked at a given point by pressure above, the artery will still be felt below. On the other hand, if it be due to overfilling with blood, the empty artery below the point of pressure cannot be felt.

Now, in this patient you can feel the artery, although you make considerable pressure above, but on stopping the flow of blood entirely, it cannot be felt. In another case you might find that, no matter how much pressure you made above, you would still find the artery lying in its bed below. If so, it indicates that the artery is quite thick, turned into something like a cord, and it probably has a very narrow caliber.

Now, that incompressibility of the pulse is to be explained in this way, and it is *the* feature of the disease. I think, that if I were blindfolded, I could go into a room and pick out at least two-thirds of the cases of Bright's disease, by the pulse alone. You notice that you have a very pale skin here. The anaemia of Bright's disease is characteristic. It is a perfect whiteness of the skin. You see it in the appearance of his hands. There is a paleness of that hand which is not present in any case where this disease is not present. And what is a more striking fact is, that you cannot redden it. You may rub and rub, and try to get the capillary circulation started in that skin, and you cannot do it. What is the reason of that? "The capillaries are obliterated." Yes, the little arteries are obliterated in this complaint, and hence the embarrassment of the circulation, an actual clogging up of the capillaries lying between the peripheral arteries and the commencing veins. Now blood runs, of course, from the arteries through the capillaries into the veins, or should do so; but here we can rub and rub the skin and fail to cause any reddening, which indicates that the arteries cannot easily empty themselves into the veins.

Well, what is the result in the arteries? Necessarily, that they are constantly overflowing, and give you, therefore, that full pulse illustrated in this patient. When you come to press upon his artery, you will find that you will have to press, and press, and press, in order to obliterate the pulse, just as if you were to press upon a hose in which the exit of the water had been shut off by turning the stop-cock. If the stop-cock were open and the water allowed to run out, you would be able to compress it readily with your foot; but try to press it while the stop-cock is on, and you will fail. Precisely so with this patient's arteries. The exit from the arteries, through the capillaries into the veins, is clogged. If it were not, the blood would run freely, and the pulse would be compressible.

Now, you will see what a number of sequelæ will depend upon that principle. Many things

connected with this disease can be explained by that one fact. We will have a slow venous current, and as a result, a tendency to dropsy, which results from anything that causes slowness in the venous radicals. The tendency is greatest in parts where the venous circulation is not so much assisted by the surrounding tissues, as about the eyes. On this account, the earlier signs of Bright's disease are oftenest in the loose parts of the face, under the eyelids, etc. Where the muscles run along the course of the veins, their contraction assists in pushing the venous circulation on, by means of the valvular arrangement within the veins. But where there are no muscles, you will first find a tendency in the veins to show a failure in the propulsion of the venous circulation. Dropsy occurs whether you have a cause of venous slowness from behind or from before. It will be from before, for instance, in case of obstruction in the liver to the portal circulation, or in case of disease of the lungs, leading to embarrassment of the right side of the heart. It will be from behind, however, in Bright's disease. There is, as said before, very slow venous circulation in Bright's disease, from the embarrassment of the capillary circulation. This is one of the explanations, at any rate, of the dropsy of Bright's disease; and the explanation of why it should first occur in the loose tissues of the body.

From the derangement of the kidneys there arises an obliteration or a thickening of the walls of the capillaries and of the arterioles, which leads to an overfilling of the arterial system. And this implies danger in the arterial system. What danger? Not aneurism, but a giving way of the arteries of the brain. They are the ones that will most commonly give trouble. Aneurism is more commonly the result of some local disease of an arterial coat, whereas in Bright's disease the entire arterial system is affected; but it will most affect the arteries of the brain, because they are not supported. The tissues that surround them give them no support whatever, and hence they are much more liable to give way. The external tunica of the arteries there is made up of very weak material compared with what it is in other parts of the body, and the artery there is far more likely to rupture, or to give you small aneurisms that lead to rupture. Now, therefore, three-fourths of the cases, particularly of hemorrhagic apoplexy, are due to Bright's disease of the kidneys. That is a rule, and on that account it is important to understand this condition of things, for the purpose of prophylaxis. There is not a more important subject for you to study than how to prevent hemiplegia, because the nature of the accident is so terrible that anything that prevents it is infinitely preferable to having to deal with it after it has occurred. Now, the great cause of hemiplegia is Bright's disease of the kidneys. It is the commonest cause; so much so, that you will probably in ordinary practice have nine cases of hemiplegia due to kidney trouble to one due to any other cause than kidney trouble. Now, as to the indications of it. I do not believe I have ever seen a case of hemiplegia in which there was not this thickening of the artery and that incom-

pressible pulse, which is so often mistaken for a strong pulse. Now, you may say that a strong pulse in an old person is a very uncommon thing; but there are many old persons whose pulse feels strong, and is mistaken for such over and over again. You will hear persons say, he has a good, strong pulse, when in reality he has a weak pulse. It is this kind of a pulse that will be mistaken for a strong one. It is one that you cannot compress, and because you cannot compress it, you think it strong. But that is a great mistake. The strong pulse is wholly dependent upon the heart. Never is the pulse strong except as it is due to the heart. Therefore, if you are in doubt whether the pulse is strong or not, examine the heart. If there is a powerful impulse, and a clear sound, it indicates a strong pulse; if there is not a strong impulse with the beat of the heart, and the first sound is weak, it matters not how the pulse feels, it is not a strong pulse. It cannot be, because the strong pulse is dependent upon a different condition of the heart. Then, taking this condition of the arteries, which you are meeting with all the time, in which they are overfull, you can very readily make out whether it is due to a want of elimination, whether it is toxæmic; and if so, that person is in danger, sooner or later, of one of the arteries of the brain giving way.

Now here is the case in which we said there were indications of a cardiac affection also. Feel his pulse, and you will see that it is both a uremic and an atheromatous pulse. It is like a wire, but it is not uniformly so, like this one. On the other hand, you can feel that it is rough. The man is somewhat aged, and he has an atheromatous artery. His symptoms are, that he had a running sore in his leg for a number of years, and after he had had that for a good while he began to get sick at the stomach, and was unable to work. He said the sickness of the stomach occurred in the morning, but I have no question that it occurred at other times as well, and was not necessarily connected with his meals. That is a suspicious symptom, nausea coming on without any reason for it, so far as the food is concerned, that the patient can discover. Such patients very frequently ascribe it to biliousness. In a case of vomiting, if it be the first time it has come on, I always examine the water.

Now, after he had had this sickness of the stomach a good deal he began to be so weak that he was obliged to give up work. On feeling of his pulse I find it intermittent. There are two beats and then a stop; two beats and a stop; two beats and a stop; and then sometimes there is a double beat, an irregular dicrotism of the pulse. Well, I know, therefore, that this is not only a diseased artery, but that it has a fault at the centre of the circulation, for there are three elements in the pulse that tell you of the condition of the heart, and there are three elements of the pulse which belong to the condition of the blood vessel. The strength of the pulse always depends upon the heart, likewise the frequency and the rhythm. The heart alone has to do with these three elements of the pulse. This patient's pulse is weak, therefore

he has a weak heart, or at least it is working weakly now; it is slow, and that is because the heart is beating slowly; there is no other reason for that; it is irregular in rhythm, and that again is due to the heart. The vascular elements, those dependent upon the condition of the artery, are, the fullness of the pulse; that is, whether it is a large pulse or a small pulse. Well, this is one midway; it is neither large nor small. Next, whether it is a compressible pulse or an incompressible pulse; that is, whether or not you can compress it readily and extinguish it. Now, that depends upon the artery exclusively. In this case the pulse is rather incompressible. It beats under all four fingers, and it requires a considerable amount of pressure to stop it. It is less compressible in the other patient than in this. And lastly, whether it is a short or a long pulse. A short pulse is one that passes very quickly under your finger, makes only a little vibration and is gone. The long pulse, on the other hand, is one in which the vibration is prolonged. You can tell the difference between them by comparing this pulse with the pulse of phthisis. In the patient with phthisis I got a little, quick, shallow pulse which came and was gone, while in this patient, on the other hand, the pulse is three times longer passing under the finger. It requires a considerable amount of practice to mark that difference. If the blood runs out of the artery easily it will be a short pulse; if it cannot get out easily it will be a long pulse.

Now, this rhythm shows that there is some difficulty, either organic or nervous, at the source, the heart. It is very common to have valvular incompetence in Bright's disease; and it is simply due to the over-distention of the arteries, the heart finding it difficult to empty the blood into the over-filled arteries, and therefore the heart itself is constantly overfilled, and allows of a little regurgitation. Hence, during life, in the great proportion of cases of Bright's disease, you have cardiac murmurs, all kinds, obstructive and regurgitant. And very frequently in cases where you thought there was valvular disease of the heart during life you will find no evidence of it after death. In reality the over-distention in the arterial system had rendered the heart constantly over-filled with blood.

MEDICAL SOCIETIES.

THE BRITISH MEDICAL ASSOCIATION.

(Continued from page 298.)

For the want of space, we omit giving any further abstracts of the addresses delivered, and will proceed at once to the more practical papers. Among the papers read in the Section of Medicine, was one on

The Curability of Attacks of Acute Phthisis (Galloping Consumption),

by T. M. McCall Anderson, M.D. By the term acute phthisis, the author meant an acute pulmonary affection, accompanied by high and continuous fever, running a rapid course, and leading in-

variably to more or less destruction of lung tissue if the patient survived long enough. He recognized three varieties of the disease: 1. Acute pulmonary tuberculosis; 2. Acute pneumonic phthisis; 3. Acute pneumonic phthisis complicated secondarily with the development of gray miliary tubercles. He thought it impossible to distinguish the second from the third variety during life; but that the first might be suspected when the disease set in suddenly with high fever, great prostration, profuse perspiration, lividity, and great acceleration of breathing, and when these symptoms were *out of all proportion to the results obtained from a physical examination of the chest*. Having given extracts from the writings of Walshe, Rousseau, and others, showing that the profession was very hopeless as to such cases, he pointed out that, in a good many cases, he had obtained excellent results from treatment, of which the following was an outline: 1. Careful skilled nursing, with constant feeding, and stimulants in small quantities often (from 4 oz. to 10 oz. daily); 2. Each night, a subcutaneous injection of $\frac{1}{16}$ to $\frac{1}{8}$ of a grain of atropin; 3. Remedies specially adapted to the removal of fever: (a) ice-cloths to the abdomen; (b) quinine, 10 to 80 grains, in a single dose, once daily; (c) a pill, composed of one grain of quinine, half a grain of digitalis, and from a quarter to three-quarters of a grain of opium, every four hours. In addition to this, special symptoms—diarrhea, constipation, and the like—must be treated on ordinary principles, and, of course, the treatment indicated must not be used in a mere routine way, but adapted to the surroundings of each individual case.

The next paper was by W. T. Gairdner, M.D., on

The Treatment of Bright's Disease; with Special Reference to the use of Diuretic Remedies.

Dr. Gairdner had been long of opinion, as the result of more than twenty five years of hospital experience, that the English practice in Bright's disease, and especially in acute and sub-acute cases, had been too much founded on the conception that the kidney, like an inflamed organ, must have, as nearly as might be, entire physiological rest; and hence that diuretics were to be avoided, even at the risk of their requiring to be replaced by more perturbatory practice. Dr. Gairdner did not hold that diuretic treatment was alone sufficient, or even in all cases expedient; but he held that the mere abstinence from diuretic treatment, or the doctrine that such practice was to be regarded with suspicion in the cases in which the simpler saline diuretics could be brought to act, was opposed to the teaching of experience. In the London schools the teaching adopted for many years was that the occurrence of active diuresis, under remedies especially adapted to that end, was to be avoided, and that it was better practice, in most cases, and especially in acute and subacute cases, to aim at purging the bowels continuously by the strongest and most irritating cathartics, than to give scope to the kidneys to respond gradually and gently to such remedies as cream of tartar, potash salts, and digitalis. The position here referred to had been modified of late years by the admission:

1st. That spontaneous diuresis often, if not invariably, occurred in such cases as a kind of crisis, or as the first step in the cure; 2d. That (as Dr. Dickinson, in particular, had emphatically taught) the copious imbibition of "clear spring water," in quantities such as to make it practically one of the most active of diuretics, tended to the relief, rather than to the obstruction, of the kidney in its physiological work; in other words, that flushing of the obstructed tubuli uriniferi, and general furtherance of the true physiological activity of the kidney tended (as Dr. Christison long ago showed) to the diminution of its pathological disturbance of functions, as indicated by albuminuria, deficient excretion of urea, and dropsey. Dr. Gairdner regarded it as in accordance with clinical experience, apart from the theory that, whenever the simpler diuretics would act at all in such cases as were usually treated by means of elimination, their action should be furthered and encouraged, in preference to other modes of elimination. While he did not at all disown the use of purgatives on the one hand, or of diaphoretics on the other, in cases in which they were specially indicated, or in which diuretics could not be brought to act, he was always disposed to make such simple diuretic practice as was indicated above the keystone of the treatment, and to consider it as more in accordance with nature, and with the spontaneous tendency to crisis above mentioned, than the use of the stronger drastic purgatives, or even of medicinal diaphoretics, or the too repeated and somewhat enervating use of warm baths, or of air and vapors at a very high temperature. Diuretics, indeed, not unfrequently failed; but so also, not unfrequently, did all the other remedies mentioned. It must also be admitted that the reasonable regulation of the skin and of the bowels was an essential part of good treatment in most cases of Bright's disease, whether attended or not with dropsey; and that in certain cases, *e.g.*, of immediately threatening uremia, drastic cathartics were sometimes the only method that could be trusted for immediate relief. In such cases Dr. Gairdner acted on the presumptions derived from Bernard and Barreswil's well-known experiments, as well as on empirical data; showing that the elimination through the bowels of excretory matters which, if retained, were dangerous to life (and notably of urea and its congeners in the form of carbonate of ammonia), might be rationally and safely accomplished for a time, at least, so as to save life and conduce to present comfort. But he regarded this perturbative course as only a temporary phase of treatment, necessary in some cases, and to be supplanted as soon as possible by the more natural and physiological determination of the liquids towards the kidney.

By the judicious use of formulae by no means complex, it was usually possible to graduate catharsis into diuresis, so to speak, in such a way as to gain whatever advantages resulted from the former practice, while at the same time seizing the earliest opportunities of inducing a true renal crisis, whereby the cure, if possible at all, was usually best completed. The exclusively diaphoretic practice of Dr. Osborne, of Dublin, seemed to have been tried and found wanting and in a

measure laid aside, until recently revived in another form in Germany, particularly by Bartels, whose admirable articles in *Ziemssen's Cyclopaedia* would probably give rise to new elaborate trials of Turkish and vapor baths. Dr. Gairdner had often employed these with benefit; but he thought that these benefits would be exaggerated, if they were so employed as to shut out diuretics, or to divert habitually, all the available liquids of the body for long periods together to one emunctory, and so to starve the supply of liquids to the kidney. In a few cases of great obstinacy, however, a certain amount of temporary benefit appeared to result from the hypodermic employment of pilocarpin in doses of one-eighth to one-fourth of a grain every second day. The limits of expediency in the use of such perturbative and medicinal diaphoresis had, however, to be determined by careful further researches. The same remark applied, in Dr. Gairdner's opinion, to bloodletting, which, at one time a frequent and even a very favorite remedy in the acute and subacute cases, had in later years almost gone out of date, but which had been yet more recently revived by several observers and practitioners of good standing.

William Marct, M.D., F.R.S., presented a paper on

The Influence of Altitude with Reference to the Treatment of Pulmonary Disease.

The author accepted the generally acknowledged theory, that cases of phthisis among the inhabitants of altitudes exceeding five or six thousand feet were so rare as to be exceptional. He also admitted that such winter stations as Davos might prove beneficial to consumptive invalids, and had in some cases apparently effected a cure. After reviewing the influence of altitude in disease with especial reference to the various descriptions of pulmonary affections, the author proceeded to account for the beneficial effects of such winter stations as Davos on consumptive invalids. He stated the results of his own experiments on respiration at various altitudes, which had a direct bearing on the present subject, and from which he arrived at the following results:—

1st. At stations at various altitudes above the sea, a smaller weight of air was taken into the lungs (or a smaller volume of air reduced to sea-side pressure and freezing point), while more carbonic acid was emitted, especially in a cold climate; and it followed that the oxygen of the air passed through the substance of the lungs into the blood more rapidly or more readily on mountain stations than near the sea level. 2d. Up to 7000 or 8000 feet, the increased volume of air breathed within a certain time (not reduced) was due to a greater expansion of the chest and lungs, and but little, if at all, to an increased rate of breathing, although at higher stations the frequency of the respiration was decidedly increased. The author concluded that the beneficial influence of high winter stations on the progress of phthisis was due: 1st. To the blood becoming more fully charged with oxygen from the air breathed, and to the phenomena of oxidation in the body being increased, thereby promoting considerably the

healthy changes in progress in the living body; 2d. To the capacity of the chest and lungs being increased—at all events, temporarily—after a winter sojourn in the mountains; and because, on that account, a greater volume of air was breathed after returning to a lower level. This last conclusion was arrived at independently of the observations and statements made by Dr. C. T. Williams, who offered a similar explanation to account for the beneficial influence of Davos in cases of phthisis.

In the Section of Surgery Gerald F. Yeo, M.D., first read a note on

The Application of the Antiseptic Method of Dressing to Cranio cerebral Surgery.

The object of the note was to give the results of experiments on the applicability of the antiseptic method of dressing to the brain and meninges, which were undertaken under the auspices of the Scientific Grants Committee of the Association. In the experiments, Dr. Yeo had had the great advantage of the advice and assistance of Dr. Ferrier. The experiments were performed on monkeys. Before the operation the scalp was purified with a strong (one in five) solution of absolute phenol in oil of glycerine. The spray was used in all but four cases. The edges of the wound were accurately brought together with sutures; horsehair being found the best. The discharge was so slight that drainage was unnecessary, and in the later cases it was omitted. Several layers of loose gauze, damped in a solution of carbolic acid (one in forty), were placed over the wound, and were held in position by about twenty turns of a narrow gauze roller, and the whole enclosed in three or four caps of gauze painted with collodion. The trephine was used for opening the skull, and a small bone-forceps was applied to shape the aperture to the required size. Of twenty-six animals operated on, only seven died; but in three of these the death might be attributed to the intense cold of last winter—one of these three survived the operation thirteen days without inflammation. One death might be assigned to chloroform. Of the remaining three deaths, one was caused by hemorrhage six days after the operation, there being no trace of inflammation; one by the shock of the operation; and one only by inflammation. Of the twenty-one animals which survived, twenty were treated successfully with antiseptic dressings, and one was treated with modified antiseptics. Among the cases treated antiseptically, there was not one case of inflammation; and where this method could not be used, there was intense encephalitis.

This was followed by an animated discussion on the treatment of wounds, in which several of the members took part.

Sir Henry Thompson, F.R.C.S., read a paper on

Lithotripsy at a Single Sitting; with a Record of its Results in Forty-six Consecutive Cases.

The paper consisted of a consideration of Bigelow's proposal, with reasons for believing it would issue in an advance for the operation of

lithotripsy. About eighteen months ago Sir H. Thompson commenced employing it as the rule; and since that time he had operated in fifty-four cases of stone in the bladder of the male adult, mostly aged; on forty-six of these by the method of one sitting; on two others by multiple sittings; and on six by lateral lithotomy. Among these fifty-four cases were three deaths, two in cases of lithotripsy by one sitting, and one after lithotomy. The reasons were given for adopting multiple lithotripsy and lithotomy in the eight cases; and the following practical deductions were appended to the paper, as the sum of the lessons to be learned by this contribution toward an attempt to estimate the value of the method in question. 1. In view of a general adoption of lithotripsy at a single sitting, it becomes more than ever important to diagnose carefully before operating, the size—and if practicable, as it mostly is—the nature of the stone, so that the means employed to remove it may correspond thereto. For, when the stone is small, or of medium size, as it is in the majority of cases, it is not only unwise, but dangerous, to employ large and unwieldy instruments to remove it. Small instruments are much safer than large ones, and do less mischief in the bladder and urethra. The latter should never be used, unless the work to be done renders them necessary; and this can only happen in a few exceptional cases. 2. There is no doubt that a practiced hand, thoroughly familiar with the details of lithotripsy, is more necessary to the success of an operation which is to be completed at a single sitting, when the stone is not small, than to that of an operation which consists of several sittings. In other words, the removal of a large stone at a single sitting is a more difficult proceeding than that which disposes of it at several trials. 3. Speaking with caution, it appeared to him that at present we are not justified in attempting to remove all stones by crushing, and certainly not by any one system of crushing. The new method rendered lithotripsy safer than before, for the stones already assigned to that process, and extended it to some which were larger than before so operated on. But he still regarded lateral lithotomy (the high operation being sometimes, perhaps, advantageous) as an admirable procedure, not only for hard stones, say of about two ounces in weight and upward, as a rough general estimate, but also for smaller ones in some cases where the urethra was not large, or other circumstances seemed to indicate it. Further, he could not doubt that many men whose experience was necessarily small would cut for a hard stone weighing an ounce more safely than they would crush it at a single sitting. Great and irretrievable damage might be easily inflicted, by large lithotrites and evacuators in unpracticed hands. For two, among the forty-eight cases of lithotripsy recently operated on multiple sittings were preferred, for the reasons given; and he strongly advised the exercise of an independent judgment in every case, and not the pursuit of any routine method, without reference to the very varied circumstances which calculous disease largely presented.

A paper was also read by Herbert W. Page, F.R.C.S., on

The Immediate Suture of Divided Nerves.

The author referred to the readiness with which divided nerves united if circumstances were favorable for the correct apposition of the ends, as in clean cut wounds, or where section had been made for the relief of neuralgia, too often frustrated by the reunion of the nerve. In jagged and lacerated wounds, where the conditions were altogether different, and where the soft parts were separated from one another, it was unusual to meet with reunion of divided nerves, whose ends had probably been wide apart. Such cases gave a history rather of neuralgia, and trophic disturbances than of regained functions and restored usefulness of limb. Success had frequently attended the operation of secondary section of nerves, as in cases of Mr. Hulke, von Langenbeck, and others referred to in the paper, which showed the desirability of primary section in all cases of divided nerve-trunks in lacerated wounds. The recorded cases of primary nerve-section were few in number; and the author, after alluding to those mentioned by Mr. Favell, in his address before the Association at Sheffield, and to those by Létiévant, in his *Traité des Sections Nerveuses*, gave the history of two successful cases of primary section of the median nerve, severed in lacerated wounds of the upper arm. The cases, one under the care of Mr. Walter Pye, and one more recently in St. Mary's Hospital, under the care of the author, were recorded in detail. Although for all practical purposes the function of the nerves had been regained, and the usefulness of the limbs thereby preserved, there had not been perfect restoration of sensation; and the author doubted whether, in face of the improbability of each and all of the divided fibres becoming once again accurately continuous in the nerve-trunk, there could ever be so perfect a restoration as would bring back sensation to the state in which it was before injury. The material used for suture, whether silk, silver, or catgut (with a preference in favor of the last), or whether it was desirable to pass the suture through the nerve-trunk as well as through the neurilemma, were matters of less importance than the avoidance of suppuration. Suppuration evidently prevented reunion in some of the cases men-

tioned in the paper; and the author concluded that in nerve-section the absence of suppuration, and the method of repair accompanying it, were of the greatest moment. These could only disturb early efforts toward union, involve the nerve-ends in an irregular cicatrix, and lead thereby to the neuralgia and trophic derangements which together made a useless limb. To the absence of suppuration in the healing of the very severe wound in his own case the author attributed in great measure the successful issue of the immediate suture of the widely separated ends of the nerve.

In a paper by Dr. Austin Meldon, on

Intravenous Injection of Milk,

the author stated that he had performed the operation twenty times, twelve of these being in cases of phthisis, in which the patient had reached an almost moribund condition. The author stated that he was somewhat disappointed as to the very temporary nature of the improvement which followed the operation in these cases, four of them having since died. He was, however, satisfied that life could be prolonged in phthisis by the operation; but when delayed, as in these cases, until the last stage, little further benefit could be expected. Four of the operations were in cases of pernicious anaemia, all of which, the author believed, were cured by the operation. Two were cases of exhaustion from hemorrhage, both of which recovered. The remaining two were cases of exhaustion after typhoid fever, in both of which much benefit followed the operation. The patient in one of them, however, died after the second operation. In conclusion, Dr. Meldon stated that he believed intravenous injection of milk to be a far better operation than the transfusion of blood. It was much more satisfactory in its results, and quite devoid of the dangers of the latter operation. He invariably used goat's milk, as the animal was easily procured in Dublin, and could be brought into the chamber of the patient—thus avoiding any delay in the transfusion after milking. He never used more than six ounces at a time, and always took care that the milk was alkaline, by adding a little carbonate of ammonia to each injection.

[To be continued.]

EDITORIAL DEPARTMENT.

PERISCOPE.**A Successful Case of Transfusion of Blood.**

The following case, which exhibits in a marked degree the beneficial effects of transfusion of blood when performed in cases of impending death from excessive hemorrhage, is reported in the New York *Medical Journal*, for August, 1880, by Joseph W. Howe, M.D.:

Mrs. B., aged twenty-two years, was delivered of a three months' fetus, November 7th, 1879.

From that date until November 11th she had repeated and profuse hemorrhages from the uterus. On the 10th the bleeding was continuous. Drs. Reynolds and Comstock, who were first called in, succeeded in controlling the hemorrhage, but not before the patient had reached the stage of collapse. They remained with her all night, endeavoring, with the ordinary means of stimulation, to rouse her, but without avail. She continued to sink in spite of everything.

On the morning of the 11th I was sent for. The patient was then completely pulseless and

partially unconscious. The extremities were cold and clammy, and it was evident that unless some fresh blood were introduced death would soon supervene. She was so far gone, that I made up my mind not to spend any time in defibrinating the blood. I opened the median basilic vein in the right arm of the patient, and introduced the closed cannula of Colin's instrument, and after passing some warm water through the cylinder of the instrument, attached it to the cannula in the patient's arm. The median cephalic vein in the right arm of the donor was then opened, and the blood was allowed to flow directly into the cylinder without defibrination. When a sufficient quantity had been obtained, and while the blood was still flowing, I injected, without any difficulty, between seven and eight ounces. The whole operation did not occupy more than five minutes in its performance.

Within half an hour the pulse returned at the wrist, the voice became clear and distinct, and she asked for something to eat, saying that she felt stronger and better in every way. One of the medical gentlemen who had been with her all night, assisting in the attempts at resuscitation, and who left in the morning, believing that there was no hope of her recovery, came in an hour after the operation, and said it was "a perfect transformation scene"—that he had no idea that a few ounces of blood could restore lost vitality so rapidly.

From that time on the patient continued to improve, and when I last heard from her she was in the enjoyment of good health and attending to her household duties without any discom-
fort whatever.

The Treatment of Asthmatic Bronchitis.

Dr. A. W. Perry says, in an article on the above disease, published in the San Francisco *Western Lancet*, for September, 1880—

In regard to the treatment of the acute attacks of asthma, occurring in the course of a chronic bronchitis, we find the best treatment to provoke free diaphoresis, by the use of morphia, aconite, carbonate ammonia, quinia, variously combined. Counter-irritation over the chest is all important, and we prefer for this the use of croton oil, until free pustulation is produced; it is severe, but usually more effective than anything else. In milder attacks, mustard plasters, or turpentine stipes, repeated two or three times a day, may be used.

The treatment of the chronic bronchitis by medicines is of minor importance. Where cough is violent or frequent, it should be restrained by narcotics, and those should be selected which, though long continued, will be least likely to disorder the appetite and bowels. We prefer, therefore, Cannabis indica resin in one-sixth to one-third grain doses, sometimes combined with belladonna, hyoscyamus, hydrocyanic acid; all of these are less sure in their effects than morphia. At the same time, small doses of sulph. quin. with sulph. iron or zinc, should be used as tonics and for diminution of excessive expectoration.

Continuous but mild counter-irritation should

never be omitted. The expectorants, squill, ipecac., antimony, I only mention to condemn entirely.

The asthma or dyspnoea in this disease may be a narrowing of the bronchial tubes by swelling of the mucous membrane, or a spasmodyc muscular narrowing. It is usually a compound of these two conditions. The remedies useful in pure or spasmodyc asthma will be found useful in this, in proportion as the nervous element predominates; chloral, five to ten grain doses every hour, cannabis indica, morphia, five-grain doses of iodide potassium, all prove highly useful. Against the inflammatory narrowing, strong counter-irritation is the most efficient.

To summarize: chronic bronchitis on the sea-coast of California has only slight remissions, is frequently complicated by asthma, and rapidly and progressively increases in severity, producing emphysema, dilation of right heart, and permanent disability. The principle treatment is, to procure decided (either short or long) intermission, by residence in a warm climate; having produced these intermissions, avoid the effects of returning to cold winds and fogs by respirators, cold bathing, and the abortive treatment of commencing naso-pulmonary catarrh.

Multiple Papillary Tumors of the Labial, Buccal and Glossal Mucous Membrane.

The following report of a case by Dr. C. J. March, of Camden, Ark., appeared in the St. Louis *Courier of Medicine and Collateral Sciences*, for September, 1880:—

Alice N., aged 9, was brought to my office June 13th, 1880, by her mother, who requested me to examine the interior of the child's mouth, "for," as she said, "there is something growing there." I complied with her request, and on inspection I found a very remarkable state of affairs. The mucous membrane of both lips, from the point where it is reflected on to the gums out to the muco-cutaneous junction, that lining both cheeks, as far back as the second molar tooth, and that covering the anterior half of the dorsum of the tongue, was studded with tumors, varying in size from that of a millet seed to that of a large pea. On the labial and buccal mucous membrane the tumors were sessile, and so thickly set that in places, they actually crowded one another. On the tongue, the papillae were in various stages of hypertrophy, some being but slightly enlarged, while others had formed quite large pedunculated and slightly lobulated tumors. The epithelium covering the tumors presented its normal appearance. The tumors manifested no tendency to hemorrhage or ulceration. It is proper to state here that the tonsils were hypertrophied also. The affection was symmetrical, there being as many tumors on one side as on the other. The mother said that about a year before she brought the child to me she noticed two or three small growths on the mucous membrane of the lower lip; hence the spread of the affection had been quite rapid, as at the time of examination there were not less than one hundred tumors of various sizes.

The fact of the hypertrophy being symmetri-

cal might lead us to suspect a constitutional cause; but I could ascertain no history of syphilitic or other taint which might be assigned as a cause.

In the way of treatment, I gave the patient internally five grains of potassium iodide in solution, after each meal, and I directed the local application of a saturated solution of sulphate of iron three or four times daily. This treatment has been followed by a prompt disappearance of the tumors.

REVIEWS AND Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

—A reprint from the September number of the *Virginia Medical Monthly* contains a treatise on *Myopia in its Various Phases*, by Julian J. Chisolm, of Baltimore, Md.

—*The Indications for Treatment in Fractures at the Elbow* is the subject of a paper by Lewis S. Pilcher, M.D., which now comes to us in the form of a reprint from the Annals of the Anatomical and Surgical Society, Vol. ii, No. 9.

—Geo. P. Rowell & Co's "American Newspaper Directory," for 1880, is a handsome volume containing a list of periodicals published in the United States and Canada. It also contains a great many advertisements of newspapers, etc. Its accuracy is not, however, equal to its typographical excellence. At Messrs. Rowell & Co's request, we sent to them, for this Directory, a sworn statement by the printer, of the regular circulation of the *REPORTER*. Either through negligence or other reasons, possibly connected with the fact that we did not accompany it with an advertisement, this statement was suppressed and a decidedly lower one entered. We are by no means alone in impugning the accuracy of the figures given in this volume.

BOOK NOTICES.

A New School Physiology. By Richard J. Dunglison, A.M., M.D., author of "The Practitioner's Reference Book," etc. Illustrated with 117 engravings. Porter & Coates, Philadelphia. Cloth, 8vo, pp. 314.

It is with great pleasure that we recommend the volume before us to the favor of teachers and others having charge of the training of the young of both sexes, hoping that the subject of which it treats may be more universally taught in our schools in the future than it has been heretofore, and that it may, when practical, be

taught by those who are competent to do so, viz., intelligent and educated physicians. Every citizen would then be to a certain extent a sanitarian, and be able to appreciate the value of hygienic measures, and there can be no doubt but that thousands of lives would annually be saved that now fall victims to preventable diseases. As a text-book for children the work is all that can be desired.

Transactions of the Indiana State Medical Society, 1880. Thirtieth Annual Session. Indianapolis. Carlon & Hollenbeck, Printers and Binders. pp. 362.

Transactions of the South Carolina Medical Association. Thirtieth Annual Session, held in Columbia, S. C., April 20th and 21st, 1880. Charleston, S. C. Edward Perry. Printer, Stationer and Bookseller. pp. 58.

The President of the Indiana State Medical Society, Dr. J. R. Weist, of Richmond, Ind., chose for his subject, "Problems in Relation to the Prevention of Disease," which he discussed in an able and thorough manner. Among the papers read, were: "The Icteric Form of Pernicious Fever," by Dr. William R. M'Mahan, of Huntingburg; "Kakonemias," by Dr. S. C. Wedington, of Jonesboro; "Ergot, its Use and Abuse," by Dr. William Commons, of Union City; "Human Longevity," by Dr. W. S. Haymond, of Indianapolis; "Expert Evidence; What is it?" by Dr. F. J. Van Vorhis, of Indianapolis; "Harmony and Associated Action in Connection with State Medicine," by Dr. J. D. Gatch, of Lawrenceburgh; "Some of the Unsolved Problems of Public Hygiene and Synteretic Jurisprudence," by Dr. J. W. Harvey, of Indianapolis; "Women Physicians in Hospitals for Insane Women," by Dr. Mary F. Thomas, of Richmond; "Sanitary Survey of Indianapolis," by Dr. Thad. M. Stevens, of Indianapolis; together with many other papers and reports of cases. The volume is handsomely bound in cloth.

The South Carolina Transactions contains, besides the President's Address, by Dr. F. M. Robertson, a report by Dr. Thomas Legare, of Charleston, on "Cases of Epileptiform Convulsions Successfully Treated by Hypodermic Injections of Sulphate of Atropia;" "Report of a Case of Arsenical Poisoning, and of a Case of Morphine Poisoning, both suicides," by Dr. C. N. Shepherd, Jr.; "Report of the Executive Committee of the State Board of Health," by Dr. S. Baruch; together with letters on various subjects.

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HOW THE METRIC SYSTEM HAS BEEN GETTING ON.

A calm survey of the field during the past summer leads to the conclusion that the extraordinary dash with which the metric system rushed into the arena a year or two ago, in this country, was a false start. A certain number of youthful doctors took it up with zeal, just as they do the new remedies which are boosted every month or two; a certain number of old doctors bored themselves greatly by learning and using it, for fear they would be called old fogies by their younger competitors. Several medical journals and one or two publication committees of State societies passed decrees violently expelling those old friends the ʒ, ʒ and ʒ from their pages. A huge reform was immediately to be inaugurated and carried by a sweeping vote.

A perceptible cooling off has followed within the last six months. The medical journals alluded to have quietly readmitted the banished old friends on divers occasions; and the metric doc-

tors, young and old, are shocked to discover that their impetuous welcome to the French stranger may possibly have been misplaced, and is not likely to be shared by their compatriots in the profession.

To show the justice of this opinion, we shall quote the words of various esteemed contemporaries, which will indicate conclusively, we take it, that the tide has turned, and that we had better drop the effort to force into prescription writing the method so hotly urged upon us.

The Detroit *Lancet* has put very strongly the fact that the meter is not only an arbitrary, but a confessedly erroneous standard. It quotes with approval the expression of the eminent astronomer, John Herschel, to the effect, that the "production of the meter was not a blunder only, it was a sin against geometrical simplicity. It was a sin, because in the earth's axis they had a straight and unvarying line."

This is a knock-down blow from an authority which it were vain to question. It puts an end to the metrical system's claim to be based on an invariable natural relation.

From the same quarter the *Michigan Medical News* speaks in equally decided terms. In its issue of August 10th, we read:—

"The advocates of the metric system are very persistent in their efforts to foist it on the profession. In season and out of season they are advocating its claims, and urging that it supplant the system of weights and measures now in use. They have succeeded in achieving for it a foothold in the coming decennial pharmacopoeia—a foothold which, unless care be exercised, will result in a repetition of the camel's intrusion, in the fable. There is no objection to its employment in pharmacy, that is, for the purpose of manufacturing, but to introduce it into the dispensing of drugs will be to cause great confusion."

"The simplicity of the metric is urged. This is an illusion. It admits of but one bisection, and then a complexity begins, from which only a specially endowed mathematical mind can extricate itself, with any degree of certainty."

This last point has been well developed in the Atlanta *Medical Journal*, by Dr. C. W. Erwin. It is psychologically true, and the result of all experience, that the mind conceives more easily a quantity expressed in a few large units than in many small ones. The distinctions of coinage all recognize this. Why have dollars when one

could speak of hundreds of cents; why cents when we could speak of thousands of mills, except for this obvious reason? Dr. Ennis' remarks are as follows:—

"No system should take precedence of the old that is not, 1st, as accurate; 2d, as easily and quickly calculated; 3d, does not express weight, quantity, bulk or measure; present to the mind as rapidly and, as nearly as may be, the exact appreciation of the quantity, weight or measure expressed by the numbers.

"It is not only necessary to calculate by arithmetic the vulgar or decimal fractional part of any unit of measure, but when the answer is called, the mind should grasp the idea of the actual quantity or bulk expressed by figures.

"Now we contend that the lower the numbers, and fewer the figures, the more readily the mind takes in the idea. For this reason experience has taught us when figures expressing quantity, weight or measure become too numerous it is best to resort to lower figures of a higher denomination."

The *Western Lancet*, San Francisco, observes:—

"It is an astonishing fact, that in looking over medical literature for a year or two back, we find so few objections to the system, when it is so manifest that such a system, if adopted into our text-books, will render the reading ambiguous and tangling, unpractical and unused; subjecting the entire text-book to the caprices of an unnatural regime."

The *Medical Annals*, Albany, in the June number, set forth strongly the inaccuracy of the system, and distinctly avowed their determination not to adopt it.

The *Medical Herald*, of Louisville, calls the whole system "an absurdity," and praised the Association of Medical Editors that they had declined to recommend it.

Meanwhile the American Medical Association, at its late meeting, recommended the adoption of this system, and is endeavoring to force its adoption by medical colleges, medical and pharmaceutical institutions and by medical men. Its Committee is to report all medical colleges who do not adopt it.

Of this action Dr. Gaillard writes, in his *Medical Journal*—

"The whole effort will be an absolute failure. Nothing less than a law making its adoption imperative by the representatives of all avocations using weights and measures can secure its use by physicians. It is idle to use resolutions and reports for this purpose. It is courting failure."

This inconsiderate action of the American

Medical Association has very naturally developed opposition. It is rather too much to have an awkward and erroneous system thus crammed down the throats of the profession, will they, nill they. This opposition has crystallized itself into the form of an "International Institute for Preserving and Perfecting Weights and Measures." Branches of this Society have been organized in Boston, Cleveland, Pittsburg, and elsewhere. Charles Latimer, of Cleveland, has written a pamphlet on "The French Metric System," published by Thos. Wilson, 188 Monroe street, Chicago, which claims to show that the time and place of the French Revolution and the worship of the Goddess of Reason did not produce a metric system worthy of adoption by the world.

For our own part, we have, as readers will remember, never advocated the forcible introduction of the metric system into prescription writing. Societies and journals travel widely beyond their proper spheres in trying to force their members and correspondents to use it. It is at best of questionable accuracy; it is more likely to lead to errors in compounding; it is less rational than the present method, and it is more difficult to comprehend and use. Its only real advantage is its decimal notation, and we can get that without resorting to it.

NOTES AND COMMENTS.

Therapeutical Notes.

EUONYMIN IN THE TREATMENT OF PSEUDO-MEMBRANOUS COLITIS.

According to *la France Médicale*, Dr. Blon-deau brought before the Société de Therapeutique, recently, a case in which he had employed euonymin in one of his patients suffering from pseudo-membranous colitis which had been vainly treated by the most energetic remedies. He prescribed euonymin, 0.05 gram, (grain $\frac{1}{4}$), extract of hyoscyamus, 0.10 gram, (grain $1\frac{1}{2}$), made into two pills, one to be taken morning and evening. After six days of this treatment the patient had regular motions and recovered her health, which she had lost for some months. CAYMAN'S OIL AND TURTLE OIL AS SUBSTITUTES FOR COD-LIVER OIL IN CONSUMPTION.

Dr. A. C. Heffenger, Passed Assistant Surgeon, U. S. Navy, in a communication to the

Boston *Medical and Surgical Journal*, September 23d, 1880, states that in northern Peru, especially in the Chira valley, the oil from the *crocodilus palpebrosus* and *crocodilus trigonatus*, as obtained directly from the reptile, is used freely in consumption and cachexie, with most satisfactory results. It has almost entirely superseded cod-liver oil, being thought more nourishing and palatable. It is given in tablespoonful doses, after meals, for long periods.

On the Island of Mauritius turtle oil has been largely used with similar success.

FORMULA FOR BURNS.

Dr. Ed. H. Travel recommends, in the *Southern Clinic* for September, 1880, the following formula as an application in burns:—

R.	Acidi carbolici (cryst.),	3 ij
	Olei olive opt.,	
	Glycerinæ.,	
	Aqua fontis, ss	3 v. M.

SIG.—Shake well before using, and keep a linen cloth saturated with the solution and applied to the burned surface.

Large Hypodermic Doses of Morphia.

The promising young practitioner who edits the Chicago *Medical Gazette* or *Review*, or whatever its present name may be, was vastly exercised last winter because a writer in this journal recommended that in certain cases half a grain to a grain of morphia should be used hypodermically. He called frantically upon us to repudiate editorially such terrible doses. What must have been his feelings on reading the article by Mr. Robert Park, in the *Practitioner*, for June, who recommends from one and a-half to four grains at a dose, hypodermically, and that of Dr. Heywood Smith, in the July number, who has injected *six grains* three times a-day with benefit! We have not noticed in the *Gazette* (or *Review*) any strictures of our English contemporary. Has not Achilles fallen asleep?

Four Years for Medical Students.

The Harvard Medical Department has planned a four years' course of study, the adoption of which is optional. "The Medical Department of the Hamline University, Minnesota," announces its adoption of a full graded course of four years.

The Chicago *Medical Journal* asks: "Will the medical press of the whole country take as much pains to notice the bold and positive stand taken by the young school in Minnesota as it

has the simple declaration on the part of Harvard of an intention to do something in the future?"

Inasmuch as the "Hamline University" has not a single medical student, and its "Professors" have been and are much more interested in their private practice than in medical education, it is easy to take a stand which involves no sacrifice nor even risk. Heroism and high principles are cheap at that price.

Napheys' Therapeutics.

The steadily increasing demand for this series of therapeutical works from Great Britain is a striking testimony to its value to intelligent physicians. The English press is very decided in its favor. The *British Medical Journal*, at the close of a long review of the *Medical Therapeutics* says:—

"This is a useful and interesting book, which no one can take up without finding something he did not know before." While the *Medical Press and Circular* (London and Dublin) writes of it: "After a close scrutiny we have come to the conclusion that the thorough revision given to the seventh edition of this book has made it the most valuable work on treatment a practitioner can possibly procure. It is abreast of the latest views, and its selection of names and treatment is judicious."

It will be gratifying to the various gentlemen engaged in this revision to find their conscientious labor thus justly appreciated.

Treatment of Cystitis.

In an article upon cystitis, published in the *Dictionnaire Encyclopédique*, M. Chauvel recalls the advice given by M. Diday, in the treatment of inflammation of the neck of the bladder. Drink three or four times a day an infusion of linseed mixed with pearl barley; rub into the lumbar region antimonial ointment until an eruption takes place; resist the desire to evacuate the last drops of urine, and take three times a day one of the following powders: Sugar, in powder, 3 ss.; *hyoscyamus* leaves, in powder, 3 ss.; divide into 20 powders. If the pain persisted, M. Chauvel would give every half hour a tablespoonful of an infusion of 45 grains of *hyoscyamus* leaves in 3 iv. of water. In a few hours there is almost always relief. If the toxic effect of the medicine manifested itself, coffee was the antidote. In chronic cystitis the author obtained good results from the following preparation, of which about the size of a cherry stone

would be given morning and evening, in a wafer. Turpentine 3 ss., camphor gr. xv., ext. hyoscyamus gr. iij.

Removal of Nævus.

Dr. Sigler states, in the *Pharm. Centralb.*, that nævus may be removed by means of croton oil, in the following manner: Push a number of needles through a cork, so that the points project 3 to 4 millimetres. Dip the points in croton oil, then insert them in the mole and withdraw. This is a sort of Baunscheidtismus. A scab will form upon the mole; and after it has dried up and dropped off the operation is twice more repeated.

Subcutaneous Injection of Ether in Sciatica.

Dr. Comegys, in *l'Union Médicale*, August 5th, 1880, recommends hypodermic injection of sulphuric ether for the treatment of sciatica. He cites two cases, one in detail, which he has cured by this plan. Three drops of ether are injected at intervals of twelve hours. The injection need not be a deep one; and though it causes a momentary sharp pain, it does not bring on any consecutive unpleasant effects. Dr. Comegys is inclined to think that the same injection might be successful in the case of tic-douloureux, for which Dr. Marino recommends hypodermic injection of ergotine.

The Ephelides of Pregnancy.

Newmann recommends, in *l'Union Médicale*, for these an ointment of chrysophanic acid one part, to lard forty parts, well mixed. Gently anoint the part, previously washed with soap and water; then apply a piece of linen, to prevent staining. Repeat the application three or four times at two days' interval, being careful not to touch the eyelids, and not to apply too strong an ointment on persons of delicate skin. The parts to which it is applied become red, then black; the skin desquamates, and the stain disappears. The same remedy may be used for pigmentary stains occurring independently of pregnancy.

Tasteless Cod-Liver Oil.

Dr. Peuteves, in *la France Médicale*, recommends, in order to render cod-liver oil tasteless, to mix a tablespoonful of it intimately with the yolk of an egg, add a few drops of essence of peppermint, and half a tumbler of sugared water, so as to obtain a *lait du poule*. By this means the taste and characteristic odor of the oil is

entirely covered, and the patients take it without the slightest repugnance. Besides, the oil being thus rendered miscible as the water in all its proportions, is in as complete state of emulsion as the fats at the moment they penetrate the chyle vessels, consequently absorption is better assured.

CORRESPONDENCE.

Consciousness.

ED. MED. AND SURG. REPORTER:—

Referring to Dr. Bigelow's article in your journal, I ask: What does natural history teach about consciousness? What does common sense teach? Simply that it is a modification of sentience—just such a higher kind of sentience as every animal possesses that has a sensorium. I believe with George Henry Lewis, that sentience is a property of all organized, living matter. For proof, I need only refer the readers of this journal to the masterly treatment of this subject in the last three volumes of *Problems of Life and Mind*, works which are as much the delight of the physician, as they are the bane of the metaphysician. That, moreover, there is a regular gradation, in correspondence with nervous evolution, from sentience of the simplest kind as seen in the undifferentiated protozoan, to the complex and coördinated forms of sentience seen especially in the higher mammalia. No intelligent and impartial observer can doubt for a moment that dumb animals possess consciousness; and this, as the product of laws and conditions of the same kind as have given rise to consciousness in man. *If consciousness in man be due to any principle independent of organization, it must be the same in the lower animals.* To this postulate sagacious thinkers in all ages have given their assent. (Vide Jos. Cook's *Biology*. Cook sees and confesses the stern logic of the claim.)

Under what *special* conditions has consciousness arisen in the animal kingdom? There is, I think, sufficient reason to believe in a growing seriality in psychical changes, necessitated by advance of the correspondence between the organism and its environment. In short, severely as has been criticised a celebrated passage in Herbert Spencer's *Psychology*, I think that we have here the "last word" of explanation.

"How only can the constituent changes of any complex correspondence be coördinated? Those abilities which an intelligent creature possesses, of recognizing diverse external objects, and of adjusting its actions to composite phenomena of various kinds, imply a power of combining many separate impressions. These separate impressions are received by the senses, by different parts of the body. If they go no further than the places at which they are received, they are useless. That an effectual adjustment may be made, they must be all brought into relation with one another.

But this implies some centre of communication common to them all, through which they severally pass; and as they cannot pass through it simultaneously, they must pass through it in succession. So that as the external phenomena responded to become greater in number and more complicated in kind, the variety and rapidity of the changes to which this common centre of communication is subject must increase; there must result an unbroken series of these changes, there must arise a consciousness. Hence the progress of the correspondence between the organism and environment necessitates a gradual reduction of the sensorial changes to a succession, and by so doing evolves a distinct consciousness, a consciousness that becomes higher as the succession becomes more rapid, and the correspondence more complete."—*Psychology*, vol. 1, p. 403.

With this Spencerian explanation of consciousness, as objectively a succession of sensorial changes, I fully agree.

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[We have received several other letters on Dr. Bigelow's article, to which we can hardly give space, particularly as the above presents the familiar scientific explanation of consciousness. It should not pass unnoticed, however, that some of the most eminent naturalists find Spencer's explanation incomplete, as, for example, Prof. E. D. Cope. This distinguished scientist, in the course of a review of Prof. Barker's Address at the last meeting of the American Association for the Advancement of Science, says, in the October number of the *American Naturalist*—

"We note here, that Prof. Barker has not touched on the question of consciousness in his address, and it might be supposed that he does not regard it as an essential element in the problem. This omission may be explained on the supposition that he does not know what to do with it; for it certainly does not seem to have any appropriate niche in the system of the purely physico-vitalists. For our own part we cannot escape it in considering the evolution of forms; that is as modifying growth nutrition, through molar movements."

Evidently the inquiry into consciousness from a purely scientific side has by no means touched its conclusion.

ED. MED. AND SURG. REP.]

NEWS AND MISCELLANY.

The Two Bogus Colleges Finally Wiped Out.

The American University of Philadelphia and the Eclectic Medical College of Pennsylvania, known to the community as Buchanan's Colleges, were, on September 30th, finally wiped out of existence. J. Howard Gendell, who represented the Commonwealth of Pennsylvania, filed his replication to the answers, put in by the colleges some time ago, to the quo warranto pro-

ceedings against them. The answers of these two corporations were, that they had a right to exercise their franchises by acts of the Legislature. Mr. Gendell's replication set out substantially that the colleges forfeited their rights under those acts, because they conferred degrees upon persons not possessing the qualifications prescribed in their charter; by selling diplomas; by granting degrees for doctor of medicine and antedating the diplomas so as to make it appear that the party had a right to practice medicine; and finally, by issuing diplomas with forged signatures. After the replication was filed the counsel for Dr. Buchanan confessed judgment of ouster, and filed, as part of the record, a letter from Dr. Buchanan instructing him to do so.

Leprosy in the Sandwich Islands.

The *British Medical Journal* informs us that, according to the report of the Board of Health of Honolulu, the Leper Hospital, on the island of Molokai, contained 684 patients on March 31st, 1880, three being children of lepers, and under one year of age. There were 424 males and 260 females. The greater portion of the lepers are treated as out-patients, and it is stated that a large number remain mixed with the people in the several islands. The average mortality among the lepers in the establishment at Molokai, has been nearly 58 per 1000 *per annum*. Dr. N. B. Emerson, physician to the establishment, states that, on the approach of damp and chilly weather in November, there is a general aggravation of symptoms in leprous persons, with fresh eruptions, attended with chill and fever closely resembling intermittent. Dr. Emerson concludes that, while much may be done to palliate, no curative means have yet been found in this disease. He is convinced that the disease is contagious, and states that, though first introduced into the Sandwich Islands about 1856, there are now thousands of lepers, and the disease is still rapidly increasing among the native population.

Dr. Holmes on Spelling Reform.

Dr. Oliver Wendell Holmes says, in a letter to a member of the English Spelling Reform Association—I should not care to be an obstructive (if I could be) in the way of any well organized, scholarly attempt to reform our English and American language. But you must allow a fair share of old square-toed prejudice in their personal likings to old square-toed people. I hate to see my name spelled *Homes*, yet I never pronounce the *l*. I know from old Camden that its derivation is from the word *holm*, and I want the extra letter.

The Drainage of Lands.

The *Sanitarian* recommends the following method as infallible:—

"Drink whisky and spend all your time at a village saloon. This will surely drain you of all your lands in a very short while."

Pills and Shot.

A doctor being out for a day's shooting took an errand boy to carry the game bag. Entering a field of turnips the dog pointed, and the boy, overjoyed at the prospect of his master's success, exclaimed: "Lor, master, there's a covey; if you get near 'em won't you physic 'em?" "Physic them, you young rascal, what do you mean?" said the doctor. "Why, kill 'em to be sure," replied the lad.

The American Academy of Medicine.

The Annual Meeting of the Academy was held last week, at Providence, R. I. The following named officers were elected: President, Dr. Edward T. Coswell, of Providence; Vice-Presidents, Drs. Henry Orlando Marcy, of Cambridge, Mass.; William T. Taylor, of Philadelphia; Howard Pinckney, of New York City, and Horace Lathrop, of Cooperstown, New York; Secretary and Treasurer, Dr. R. J. Dunglison, of Philadelphia; Assistant Secretary, Dr. Charles McIntire, of Easton, Pennsylvania.

Preserving Rubber Instruments.

Various articles and instruments made of rubber are apt, with time, to become dry, to crack, grow brittle, and lose their elasticity. Dr. Pol recommends the following simple mixture:—Water of ammonia one part, water two parts—in which the articles should be immersed for a length of time, varying from a few minutes to one-half or one hour, until they resume their former elasticity, smoothness, and softness.

Starvation Heroes.

After all, it would seem, says the *Med. Press and Circular*, that Dr. Tanner is only a plagiarist, and four hundred years behind the time. In the church of St. Mary, at Bury St. Edmunds, is an altar tomb, surmounted by a recumbent figure of a starved man, the details of which are well executed. It was erected to the memory of John Baret, who died of starvation, in 1463, while attempting to fast forty days and forty nights.

Fever in Rio Janeiro.

The National Board of Health is advised, from Rio de Janeiro, that during the week ending September 3d there had been two deaths from yellow fever, one from smallpox, four from typhoid fever, seven from pernicious fever, and that the total number of deaths from all causes aggregated one hundred and sixty-nine.

American Association for the Cure of Inebriates.

The Eleventh Annual Meeting of the American Association for the Cure of Inebriates will be held in the rooms of the Young Men's Association, New York City, October 20th, 1880. Commencing at 11 A.M.

T. D. CROTHERS, M.D., Secretary.

Personal.

—At San Francisco, September 20th, Dr. Samuel P. Chalfant, found guilty of murder in the second degree, for killing Josiah S. Bacon, was sentenced to ten years' imprisonment.

—Dr. Warburg, the discoverer of Warburg's tincture, has sunk into old age and poverty. A public subscription has been opened for him.

—Dr. Simeon Denton's wedding dinner at Hancock, Illinois, was eaten by over thirty guests, and immediately afterwards nearly all of them were taken violently ill. Somebody had abstracted some poison from the Doctor's stock of drugs, and put it into the wine.

—Dr. William Williams, of Somerset county, Me., died a few days ago, from the infirmities of old age, being in his eighty-fifth year. For a number of years Dr. Williams represented Somerset county in the State Legislature and was president of the Senate one session. At one time Dr. Williams owned over one hundred slaves and a large landed estate.

—Dr. Antoine Racinet, Deputy for Cotes du Nord, France, is dead, aged ninety-six years. He was the oldest of the French Legislators, and was probably the oldest physician in France, he being born January 1st, 1785, serving as a soldier in the armies of Napoleon.

—Newspapers are discussing the subject of the connection of the malarial diseases with the mental characteristics of the victims. A student of Shakespeare has said that as the great dramatist was bred in an atmosphere filled with malaria, he created "Iagos," "Hamlets," and "Macbeths."

QUERIES AND REPLIES.

Dr. C. E. O., of Miss., writes:—

Will you please inform me, through the REPORTER, whether or not *cancer* is inoculable. Is it safe to use a speculum on a sound woman that has been previously used on one suffering from carcinoma uteri.

Ans.—Most histologists hold that carcinomatous matter may be conveyed from one person to another, and as long as there is the least doubt on the subject, it would be improper to use any instrument which had been previously used on a patient suffering with cancer without the most thorough cleaning.

MARRIAGE.

BARDWELL—McKINNEY.—In Emporium, Pa., Sept. 22d, 1880, at the residence of the bride's brother, by the Rev. H. Q. Miller, Rector of Emmanuel Church, E. O. Bardwell, M.D., of Emporium, and Miss Margaret McKinney, of Cincinnati, O., daughter of Isaac McKinney, M.D., of Jersey Shore, and niece of W. H. Woods, Esq., of Cincinnati. No cards.

DEATH.

GRUMBINE.—At Mt. Zion, Lebanon Co., Pa., on the 21st of September, of typhoid fever, Annie E. Grumbine, wife of Dr. Ezra Grumbine, and daughter of Dr. D. H. Beaver, of Fredericksburg, Pa., aged thirty-one years, eight months and eight days.